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 1907666.0 30 May 2019 (30.05.2019) GB</p> <p>(71) Applicant (<i>for all designated States except BB, CN</i>): NANOFILM TECHNOLOGIES INTERNATIONAL PTE LTD [SG/SG]; 28 Ayer Rajah Crescent, #02-02/03/04, Ayer Rajah Industrial Estate, Singapore 139959 (SG).</p> <p>(71) Applicant (<i>for CN only</i>): NANOFILM VACUUM COATING (SHANGHAI) CO., LTD. [CN/CN]; 399 Songhui Road, Quingpu District, Shanghai, 201703 (CN).</p> | <p>(71) Applicant (<i>for BB only</i>): SCHLICH [GB/GB]; 9 St Catherine's Road, Littlehampton West Sussex BN17 5HS (GB).</p> <p>(72) Inventors: SHI, Xu; c/o Nanofilm Technologies International Pte Ltd, 28 Ayer Rajah Crescent #02-02/03/04, Ayer Rajah Industrial Estate, Singapore 139959 (SG). YANG, Ming Chu; c/o Nanofilm Technologies International Pte Ltd, 28 Ayer Rajah Crescent #02-02/03/04, Ayer Rajah Industrial Estate, Singapore 139959 (SG). TAN, Kok How; c/o Nanofilm Technologies International Pte Ltd, 28 Ayer Rajah Crescent #02-02/03/04, Ayer Rajah Industrial Estate, Singapore 139959 (SG).</p> <p>(74) Agent: SCHLICH; 9 St Catherine's Road, Littlehampton West Sussex BN17 5HS (GB).</p> <p>(81) Designated States (<i>unless otherwise indicated, for every kind of national protection available</i>): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA,</p> |
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(54) Title: IMPROVED CATHODE ARC SOURCE

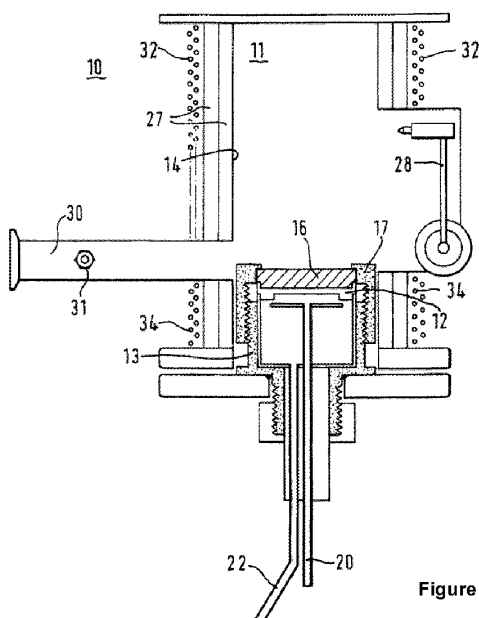


Figure 1

(57) Abstract: A cathode arc source comprises: a cathode target; a first magnetic field source located above the target; a second magnetic field source located below the target; and a third magnetic field source located between the first and second magnetic field sources and having an opposite polarity to the first magnetic field source; wherein the resultant magnetic field from the first, second and third magnetic field sources has zero field strength in a direction substantially normal to the target at a position above the target. The invention also provides methods of striking a cathode target and methods of depositing coatings which can be carried out using the cathode arc source described herein.

SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR,
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